NAVSEA
STANDARD ITEM

FY-02

ITEM NO: 009-43
DATE: 14 SEP 2000
CATEGORY: II

1. SCOPE:

1.1 Title: Light-Off Assessment (LOA) Support for Steam Propulsion System; provide

2. REFERENCES:

a. None.

3. REQUIREMENTS:

3.1 Complete work in the main propulsion machinery spaces, steering gear rooms, shaft alleys, pump rooms, auxiliary machinery rooms, designated fuel tanks, and feedwater tanks at least 15 calendar days prior to the scheduled Light-Off Assessment (LOA). Repairs, installations, testing, and adjustments of auxiliary machinery, systems, and equipments outside those spaces which support the main propulsion system directly, indirectly, or for emergencies shall also be completed.

3.1.1 The term complete is defined to mean the accomplishment of contractor responsible work that is possible without lighting off the boilers. Steam shall not be introduced into propulsion systems from any source until after a successful Light-Off Assessment.

3.1.2 The following work shall be complete:

3.1.2.1 Repair and installation of machinery, equipment, piping systems, gages, thermometers, meters, operating instructions and warning plates, protective guards, flange shields, remote shutdown devices, strainer shields, valves and handwheels, insulation and lagging, check valves, steam traps and orifices, regulators and reducing valves, remote operating gear and pull cables, valve reach rods, pipe hangers and braces, valve locking devices, valve position indicators, gage lines, label plates, relief valves and hand lifting levers, boiler uptakes and stacks, boiler safety valves and easing gear, sight glasses and guards, fuel strainers, fuel burner drip pans, soot blowers and chains, boiler casings, firefighting systems and equipment, automatic boiler control system (combustion and feedwater), main feed pump control systems, deck plates, handrails, ladders, ventilation systems, supply and exhaust vent screens, lighting systems (incandescent, fluorescent, and emergency battle lanterns), electric cables and runs, cable straps, cable

packing, cable tags, alarm systems, interior communication systems, ground straps, resilient mounts, safety devices, stenciling, tachometers, and access closures.

3.1.2.2 Calibration of gages, thermometers, tachometers, pyrometers, and meters.

3.1.2.3 Cold setting of relief valves, steam turbine governors, diesel engine governors and overspeed trips, piping spring hangers, regulators and reducing valves, low suction trips, high temperature alarms and switches, high and low pressure control switches, low lube oil pressure alarms, boiler water high and low level alarms.

3.1.2.4 Painting.

3.1.2.5 Filling of lube oil, fuel oil, and feedwater tanks.

3.1.2.6 Boilers in designated lay-up.

3.1.2.7 Bilges shall be clean and gas free, "Safe for Workers."

3.1.3 Complete portions of required test procedures that can be completed without steam.

3.2 Correct contractor responsible preliminary LOA discrepancies prior to the turnover of engineering spaces to Ship's Force. The two-week period prior to the LOA is reserved for Ship's Force preparation for LOA. Contractor work will not be allowed in the engineering spaces during this period unless specifically authorized by the SUPERVISOR.

3.2.1 Submit a weekly report on the status of completion of preliminary LOA discrepancies. Notify the SUPERVISOR immediately upon determination of any discrepancies that cannot be corrected prior to the scheduled LOA, giving the reason and expected completion date.

3.3 Provide the services of a contractor quick response team during the LOA to correct Government and contractor discrepancies.

3.3.1 Contractor shall coordinate the correction of discrepancies as they are discovered at the direction of the SUPERVISOR.

3.3.2 The quick response team members shall have with them (or readily accessible) the tools of their trade for immediate use in the correction of discrepancies.

4. NOTES:

4.1 The LOA is a comprehensive assessment of the ship in the key areas of: The level of knowledge and state of training of propulsion plant

personnel; the adequacy of Engineering Department administrative programs and procedures; the material readiness of the propulsion plant; and the state of cleanliness and preservation of main propulsion and auxiliary machinery spaces. The LOA will be accomplished by the Propulsion Examining Board (PEB) or the Type Commander Staff. The assessment will be conducted immediately prior to scheduled boiler light-off and it must be concluded successfully prior to boiler light-off. The material portion assessment usually takes less than 12 hours. If restrictive discrepancies are identified, those discrepancies must be corrected prior to boiler light-off.

4.2 The SUPERVISOR will establish an inspection team and accomplish a preliminary LOA inspection in conjunction with Ship's Force four to eight weeks prior to the LOA to determine and record discrepancies which would impact upon the LOA. The pre-LOA will be about four days in duration and will result in the identification of discrepancies and incomplete work considered necessary to support a successful Light-Off Assessment. Each discrepancy noted in the inspection will be described in simple terms on a four part, serialized form. The form will identify the general location of the discrepancy and the associated Work Item number, if applicable. The fourth copy of the form, made of hard card with an attachment wire, will be hung by the SUPERVISOR's inspection team in the immediate proximity of the discrepancy (on the deficient item itself, when practical). Upon completion of the pre-LOA the SUPERVISOR will identify contractor responsible discrepancies to the contractor. Deficient items identified that are the responsibility of the Government will be screened for accomplishment by the Ship's Force. That portion of this work that cannot be accomplished by the Ship's Force will be considered for accomplishment by the contractor.

4.2.1 Any time after completion of the pre-LOA inspection that additional discrepancies are discovered, they will be similarly identified and screened.